

DE0201C
Baltimore State Government Center
Board of Public Works

Saratoga State Center – Garage Improvements (Baltimore City)

General Obligation Bonds **\$4,445,000**

Summary of Recommended Bond Actions

1. Saratoga State Center – Garage Improvements

Approve.

Bill Text: Provide funds to construct garage improvements at the Saratoga State Center.

Project Description: Repair and upgrade the floor slabs in the seven-level parking garage. Prior repairs to the undersides of the floor slabs made in February 2009 and funded through the Department of General Services (DGS) Facility Renewal Program revealed significant deterioration in each of the concrete floor slabs undermining the structural integrity of the garage. If left unaddressed, future deterioration will render the garage structurally unsafe and unusable.

Project Summary Information

Total Project Cost:	\$4,795,000	Cost Per Square Foot – Base:	\$75
Budget Estimate Stage:	100% Construction Document	With Escalation and Contingencies:	\$86
Program Plan Status:	Approved Part I and Part II	Construction Contingency:	10%
Green Building:	No	Project Design Cost %:	6.6%
Est. Completion Date:	June 2013		

Project Analysis

Built in 1925, the Saratoga Garage provides 240 parking spaces for the Department of Human Resources and DGS at the Saratoga State Center in Baltimore City. The structure includes a basement level, offices on the first floor, four parking levels, and storage space on the sixth floor.

In early 2009, repairs were made to the parking levels following an incident where falling concrete damaged a parked car. These repairs unearthed significant deteriorations in the concrete floor slab and the reinforcing steel due to the intrusion of salt into the floor slab that was corroborated in a structural evaluation of facility. The deteriorating structural conditions of the floor slabs result from salt water penetration that both spalls the concrete and corrodes the steel reinforcements embedded in the concrete which causes further cracking and spalling of the concrete.

Although the project is technically a facility renewal project, it is funded outside of the DGS Facility Renewal Program due to the estimated cost which exceeds \$1 million. Project design is complete, and DGS is currently reviewing the 100% construction design documents. The final cost evaluation from the design team is consistent with the project estimate provided in the DGS cost estimate work sheet. Construction will commence as soon as the proposed fiscal 2013 authorized funds become available on June 1, 2012, with completion expected within 12 months, or June 2013.

The scope of the work for this project includes the following:

- remove all existing asphalt topping;
- repair existing concrete damage;
- apply a bonded concrete sloped overlay to the slab surfaces to provide drainage;
- apply an elastomeric traffic-bearing deck coating system over the new overlay to prevent water penetration in the concrete;
- apply a sealant to the entire top surface of the parking deck; and
- re-stripe the parking spaces.

The project cost estimates also include allowances for mechanical systems (\$300,000) and electrical systems (\$100,000). DGS advises, in regards to the electrical system, that certain repairs of the floor slab will require temporary movement of lights. Once the floor is fixed in an area, the lights will then be reinstalled. While most of the electric lines are hanging from the ceiling and/or walls, it is possible that there are lines within the concrete slabs. Since the whereabouts are unknown, there is a potential for damage, or the lines could be damaged from water that has worked its way into the concrete. With respect to the mechanical systems, there is a need to temporarily move drains out of the way of repairs and then reinstalled them after the repair. In an effort to provide better drainage of the garage, additional drains will be added.

The proposed funding also includes a 10% construction contingency allowance rather than the customary 5% allowance. DGS explains that the layer of asphalt over the concrete floor slabs makes it difficult to determine the extent of the repairs. Were the asphalt already removed prior to starting the project, a more accurate evaluation of the extent of the repairs could have been provided. The design team was able to provide an extensive repair plan, but there is still some chance for some components of the project to be bigger than expected or new areas requiring repair discovered after the removal of the asphalt. For that reason, among others, the 10% construction contingency, in lieu of a standard 5% allowance, is a requested “safety valve” needed to hopefully protect the overall capital investment.

Prior Authorization and Capital Improvement Program

Authorization Uses (\$ in Millions)

<i>Fund Uses</i>	<i>Prior Authorization</i>	<i>2013 Request</i>	<i>2014 Estimate</i>	<i>2015 Estimate</i>	<i>2016 Estimate</i>	<i>2017 Estimate</i>
Acquisition	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Planning	0.350	0.000	0.000	0.000	0.000	0.000
Construction	0.000	4.445	0.000	0.000	0.000	0.000
Equipment	0.000	0.000	0.000	0.000	0.000	0.000
Total	\$0.350	\$4.445	\$0.000	\$0.000	\$0.000	\$0.000

Authorization Sources (\$ in Millions)

<i>Fund Sources</i>	<i>Prior Authorization</i>	<i>2013 Request</i>	<i>2014 Estimate</i>	<i>2015 Estimate</i>	<i>2016 Estimate</i>	<i>2017 Estimate</i>
GO Bond	\$0.350	\$4.445	\$0.000	\$0.000	\$0.000	\$0.000
Total	\$0.350	\$4.445	\$0.000	\$0.000	\$0.000	\$0.000

GO Bond Recommended Actions

1. Approve.

Capital Project Cost Estimate Worksheet

Department: Board of Public Works
Project Number: DE0201C
Project Title: Saratoga State Center – Garage Improvements
Analyst: Matthew D. Klein

Structure

New Construction:	36,750 Sq. Ft. X	\$75.00 Sq. Ft. =	\$2,756,250
New Construction:	0 Sq. Ft. X	\$0.00 Sq. Ft. =	0
Renovation:	0 Sq. Ft. X	\$0.00 Sq. Ft. =	0
Renovation:	0 Sq. Ft. X	\$0.00 Sq. Ft. =	0
Built-in Equipment:			0
Demolition:			0
Information Technology:	36,750 GSF X	\$0.00 GSF =	0
Telecommunications:			0
Miscellaneous – Other:	Asphalt Topping Removal		400,000
Miscellaneous – Other:	Seal Top of Slab		150,000
Miscellaneous – Other:	Mechanical Systems		300,000
Miscellaneous – Other:	Electrical Systems		100,000
Subtotal			\$3,706,250
Regional Factor:	100.0%		0
Subtotal			\$3,706,250
Escalation to Mid-point:	1.33 Yrs. X	3.6% =	4.83% 179,012
Total Cost of Structure (Bid Cost)			\$3,885,262

Site Work and Utilities

Site Improvements:	0 + regional factor + mid-point escalation	\$0
Utilities:	0 + regional factor + mid-point escalation	0
Project Subtotal (Bid Cost)		\$3,885,262

Fees and Miscellaneous Costs

Green Building Premium:	0.0%	\$0
Total Construction Contingency:	10.0%	388,526
Inspection Cost:	3.2%	124,328
Miscellaneous:	Reviews and Permits	62,000
Miscellaneous:	CPM Schedule	47,000
Miscellaneous:		0
A/E Fee through Construction Phase @	6.6%	288,165
Total Cost of Project		\$4,795,281

Base Cost Per New Square Foot	\$75
Adjusted Cost Per New Square Foot (incl. escalation, contingencies, and Green Bldg.)	\$86
Base Cost Per Renovated Square Foot	\$0
Adjusted Cost Per Renovated Square Foot (incl. escalation, conting., and Green Bldg.)	\$0